

WHAT IS CLAIMED IS:

1. A flat platen for use in an image forming apparatus, the image forming apparatus including a side edge detector that detects a side edge of a recording medium that is fed in a predetermined direction, the side edge detector having a light-emitting device and a light receiving device that are disposed facing the recording medium, wherein the side edge detector detects the side edge of the recording medium while moving in a direction perpendicular to the predetermined direction in order to emit light from the light emitting device, the flat platen comprising:

a surface that faces the recording medium and supports the recording medium thereon; and

an anti-reflective treatment that reduces an amount of light, emitted from the light emitting device, that is reflected on the surface to the light receiving device, wherein the surface is processed with the anti-reflective treatment at least in a part irradiated with the light emitted from the light emitting device.

2. The flat platen according to claim 1, wherein the anti-reflective treatment applied to the surface is a matte treatment.

3. The flat platen according to claim 2, wherein the matte treatment is texturing.

4. The flat platen according to claim 1, wherein the anti-reflective treatment is a disposition of a light absorbent member on the surface.

5. The flat platen according to claim 1, wherein the anti-reflective treatment is an opening in the surface.

6. The flat platen according to claim 1, wherein the anti-reflective treatment is a groove having an inclined plane in the surface.

7. The flat platen according to claim 1, wherein the anti-reflective treatment is a protrusion having an inclined plane in the surface.

8. The flat platen according to claim 1, further comprising:  
a contact area reducing member that reduces an area contacting the recording medium to be fed in the predetermined direction.

9. The flat platen according to claim 8, wherein the contact area reducing member is a plurality of ribs that protrude from the surface.

10. The flat platen according to claim 9, wherein the ribs protrude 2 mm or more from the surface.

11. The flat platen according to claim 9, wherein the ribs are not disposed under a position extending vertically downwardly from a side edge of a standard-size recording medium to be fed.

12. The flat platen according to claim 9, wherein the ribs are not disposed within 2 mm outward from the position extending vertically downwardly from a side edge of a standard-size recording medium to be fed.

13. The flat platen according to claim 9, wherein the ribs are made up of at least two kinds of ribs of different heights.

14. The flat platen according to claim 8, wherein the side edge detector passes over the contact area reducing member and the anti-reflective treatment.

15. The flat platen according to claim 1, further comprising plates disposed on side edges of the flat platen and between the surface and the side edge detector in order to prevent the recording medium from moving toward the side edge detector.

16. The flat platen according to claim 1, wherein the anti-reflective treatment is processed on the surface at areas that correspond to a vicinity of a side edge of a standard-size recording medium to be fed.

17. The flat platen according to claim 13, wherein a first kind of rib that has a lower height than a second kind of rib is closer to a side edge of a standard-size recording medium to be fed.

18. An image forming apparatus, comprising:  
an image forming device that forms an image on a recording sheet;  
a surface that is disposed in a position opposite to a direction the image forming device forms an image and includes an area on which the recording sheet rests;  
a sheet feeding device that feeds the recording sheet in a predetermined direction; and  
a side-edge detecting device having a light emitting device and a light receiving device that are disposed facing the recording sheet, the side edge detector detects a side edge of the recording sheet while moving in a direction perpendicular to the predetermined direction in order to emit light from the light emitting device, wherein at least an area irradiated with the light from the light emitting device is applied with an anti-reflective treatment that reduces an amount of light, emitted from the light emitting device, that is reflected on the surface and led to the receiving device.

19. The image forming apparatus according to claim 18, wherein the anti-reflective treatment is a groove having an inclined plane in the surface.

20. The image forming apparatus according to claim 18, wherein the anti-reflective treatment is a protrusion having an inclined plane in the surface.